

#2

OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/865,198

DATE: 06/12/2001

TIME: 13:14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\06122001\I865198.raw

4 <110> APPLICANT: Zhu, Zhenping
 6 <120> TITLE OF INVENTION: Bispecific Immunoglobulin-Like Antigen Binding Proteins and
 Method of
 7 Production
 9 <130> FILE REFERENCE: 11245/47102
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/865,198
 12 <141> CURRENT FILING DATE: 2001-05-24
 13 <150> PRIOR APPLICATION NUMBER: US 60/206,749
 14 <151> PRIOR FILING DATE: 2000-05-24
 16 <160> NUMBER OF SEQ ID NOS: 34
 17 <170> SOFTWARE: WordPerfect 8.0 for Windows
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 10
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Mouse
 25 <400> SEQUENCE: 1
 27 Gly Phe Asn Ile Lys Asp Phe Tyr Met His
 28 1 5 10
 31 <210> SEQ ID NO: 2
 32 <211> LENGTH: 17
 33 <212> TYPE: PRT
 34 <213> ORGANISM: Mouse
 36 <400> SEQUENCE: 2
 38 Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe Gln
 39 1 5 10 15
 41 Gly
 42 17
 45 <210> SEQ ID NO: 3
 46 <211> LENGTH: 8
 47 <212> TYPE: PRT
 48 <213> ORGANISM: Mouse
 50 <400> SEQUENCE: 3
 52 Tyr Tyr Gly Asp Tyr Glu Gly Tyr
 53 1 5
 55 <210> SEQ ID NO: 4
 56 <211> LENGTH: 10
 57 <212> TYPE: PRT
 58 <213> ORGANISM: Mouse
 60 <400> SEQUENCE: 4
 62 Ser Ala Ser Ser Ser Val Ser Tyr Met His
 63 1 5 10
 66 <210> SEQ ID NO: 5
 67 <211> LENGTH: 7
 68 <212> TYPE: PRT
 69 <213> ORGANISM: Mouse
 71 <400> SEQUENCE: 5
 73 Ser Thr Ser Asn Leu Ala Ser
 74 1 5

ENTERED

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/865,198

DATE: 06/12/2001
 TIME: 13:14:54

Input Set : A:\es.txt
 Output Set: N:\CRF3\06122001\I865198.raw

```

77 <210> SEQ ID NO: 6
78 <211> LENGTH: 9
79 <212> TYPE: PRT
80 <213> ORGANISM: Mouse
82 <400> SEQUENCE: 6
84   Gln Gln Arg Ser Ser Tyr Pro Phe Thr
85       1               5
88 <210> SEQ ID NO: 7
89 <211> LENGTH: 117
90 <212> TYPE: PRT
91 <213> ORGANISM: Mouse
93 <400> SEQUENCE: 7
95   Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
96       1               5               10               15
98   Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
99       20               25               30
101  Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
102       35               40               45
104  Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Gly Tyr Ala Pro Lys Phe
105       50               55               60
107  Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
108       65               70               75               80
110  Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
111       85               90               95
113  Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
114       100              105              110
116  Val Thr Val Ser Ser
117       115
120 <210> SEQ ID NO: 8
121 <211> LENGTH: 108
122 <212> TYPE: PRT
123 <213> ORGANISM: Mouse
125 <400> SEQUENCE: 8
127  Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
128       1               5               10               15
130  Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
131       20               25               30
133  His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
134       35               40               45
136  Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
137       50               55               60
139  Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
140       65               70               75               80
142  Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
143       85               90               95
145  Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys Arg Ala
146       100              105
149 <210> SEQ ID NO: 9
150 <211> LENGTH: 30

```

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/865,198

DATE: 06/12/2001
 TIME: 13:14:54

Input Set : A:\es.txt
 Output Set: N:\CRF3\06122001\I865198.raw

```

151 <212> TYPE: DNA
152 <213> ORGANISM: Mouse
154 <400> SEQUENCE: 9
156   ggcttcaaca ttaaagactt ctatatgcac                      30
159 <210> SEQ ID NO: 10
160 <211> LENGTH: 51
161 <212> TYPE: DNA
162 <213> ORGANISM: Mouse
164 <400> SEQUENCE: 10
166   tggattgatc ctgagaatgg tgattctggt tatgccccga agttccaggg c      51
169 <210> SEQ ID NO: 11
170 <211> LENGTH: 24
171 <212> TYPE: DNA
172 <213> ORGANISM: Mouse
174 <400> SEQUENCE: 11
176   tactatggtg actacgaagg ctac                                24
179 <210> SEQ ID NO: 12
180 <211> LENGTH: 30
181 <212> TYPE: DNA
182 <213> ORGANISM: Mouse
184 <400> SEQUENCE: 12
186   agtgccagct caagtgtgtaag ttacatgcac                      30
189 <210> SEQ ID NO: 13
190 <211> LENGTH: 21
191 <212> TYPE: DNA
192 <213> ORGANISM: Mouse
195 <400> SEQUENCE: 13
197   agcacatcca acctggcttc t                                  21
200 <210> SEQ ID NO: 14
201 <211> LENGTH: 27
202 <212> TYPE: DNA
203 <213> ORGANISM: Mouse
205 <400> SEQUENCE: 14
207   cagcaaagga gtagttaccc attcacg                            27
210 <210> SEQ ID NO: 15
211 <211> LENGTH: 351
212 <212> TYPE: DNA
213 <213> ORGANISM: Mouse
215 <400> SEQUENCE: 15
217   caggtcaagc tgcagcagtc tggggcagag cttgtggggt caggggcctc agtcaaattg    60
218   tcctgcacaa cttctggctt caacattaaa gacttctata tgcactgggt gaagcagagg    120
219   cctgaacagg gcctggagtg gattggatgg attgatcctg agaatgggtga ttctggttat    180
220   gccccgaagt tccagggcaa ggccaccatg actgcagact catcctccaa cacagcctac    240
221   ctgcagctca gcagcctgac atctgaggac actgccgtct attactgtaa tgcatactat    300
222   ggtgactacg aaggctactg gggccaaggg accacggtca cegtctcctc a          351
225 <210> SEQ ID NO: 16
226 <211> LENGTH: 324
227 <212> TYPE: DNA
228 <213> ORGANISM: Mouse

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/865,198

DATE: 06/12/2001

TIME: 13:14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\06122001\I865198.raw

```

230 <400> SEQUENCE: 16
232   gacatcgagc tcactcagtc tccagcaatc atgtctgcat ctccagggga gaaggtcacc   60
233   ataacctgca gtgccagctc aagtgttaagt tacatgcact ggttccagca gaagccaggc  120
234   acttctccca aactctggat ttatagcaca tccaacctgg cttctggagt ccctgctcgc  180
235   ttcagtggca gtggatctgg gacctcttac tctctcacia tcagccgaat ggaggctgaa  240
236   gatgctgcca cttattactg ccagcaaagg agtagttacc cattcacgtt cggctcgggg  300
237   accaagctgg aaataaaacg ggcg                                     324
240 <210> SEQ ID NO: 17
241 <211> LENGTH: 15
242 <212> TYPE: PRT
243 <213> ORGANISM: Mouse
245 <400> SEQUENCE: 17
247   Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
248       1               5               10               15
251 <210> SEQ ID NO: 18
252 <211> LENGTH: 45
253 <212> TYPE: DNA
254 <213> ORGANISM: Mouse
256 <400> SEQUENCE: 18
258   ggtggaggcg gttcaggcgg aggtggctct ggcggtggcg gatcg                               45
261 <210> SEQ ID NO: 19
262 <211> LENGTH: 10
263 <212> TYPE: PRT
264 <213> ORGANISM: Mouse
266 <400> SEQUENCE: 19
268   Gly Gly Gly Gly Ser Gly Gly Gly Gly Ser
269       1               5               10
272 <210> SEQ ID NO: 20
273 <211> LENGTH: 15
274 <212> TYPE: DNA
275 <213> ORGANISM: Mouse
277 <400> SEQUENCE: 20
279   ggtggaggcg gttca                                     15
282 <210> SEQ ID NO: 21
283 <211> LENGTH: 17
284 <212> TYPE: PRT
285 <213> ORGANISM: Mouse
287 <400> SEQUENCE: 21
289   Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe Gln
290       1               5               10               15
292   Gly
293       17
296 <210> SEQ ID NO: 22
297 <211> LENGTH: 117
298 <212> TYPE: PRT
299 <213> ORGANISM: Mouse
301 <400> SEQUENCE: 22
303   Gln Val Lys Leu Gln Gln Ser Gly Ala Glu Leu Val Gly Ser Gly Ala
304       1               5               10               15

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/865,198

DATE: 06/12/2001

TIME: 13:14:54

Input Set : A:\es.txt

Output Set: N:\CRF3\06122001\I865198.raw

```

306 Ser Val Lys Leu Ser Cys Thr Thr Ser Gly Phe Asn Ile Lys Asp Phe
307           20           25           30
309 Tyr Met His Trp Val Lys Gln Arg Pro Glu Gln Gly Leu Glu Trp Ile
310           35           40           45
312 Gly Trp Ile Asp Pro Glu Asn Gly Asp Ser Asp Tyr Ala Pro Lys Phe
313           50           55           60
315 Gln Gly Lys Ala Thr Met Thr Ala Asp Ser Ser Ser Asn Thr Ala Tyr
316           65           70           75           80
318 Leu Gln Leu Ser Ser Leu Thr Ser Glu Asp Thr Ala Val Tyr Tyr Cys
319           85           90           95
321 Asn Ala Tyr Tyr Gly Asp Tyr Glu Gly Tyr Trp Gly Gln Gly Thr Thr
322           100          105          110
324 Val Thr Val Ser Ser
325           115

```

328 <210> SEQ ID NO: 23

329 <211> LENGTH: 106

330 <212> TYPE: PRT

331 <213> ORGANISM: Mouse

333 <400> SEQUENCE: 23

```

335 Asp Ile Glu Leu Thr Gln Ser Pro Ala Ile Met Ser Ala Ser Pro Gly
336   1           5           10           15
338 Glu Lys Val Thr Ile Thr Cys Ser Ala Ser Ser Ser Val Ser Tyr Met
339           20           25           30
341 His Trp Phe Gln Gln Lys Pro Gly Thr Ser Pro Lys Leu Trp Ile Tyr
342           35           40           45
344 Ser Thr Ser Asn Leu Ala Ser Gly Val Pro Ala Arg Phe Ser Gly Ser
345           50           55           60
347 Gly Ser Gly Thr Ser Tyr Ser Leu Thr Ile Ser Arg Met Glu Ala Glu
348           65           70           75           80
350 Asp Ala Ala Thr Tyr Tyr Cys Gln Gln Arg Ser Ser Tyr Pro Phe Thr
351           85           90           95
353 Phe Gly Ser Gly Thr Lys Leu Glu Ile Lys
354           100          105

```

357 <210> SEQ ID NO: 24

358 <211> LENGTH: 51

359 <212> TYPE: DNA

360 <213> ORGANISM: Mouse

362 <400> SEQUENCE: 24

364 tggattgata ctgagaatgg tgattctgat tatgccccga agttccaggg c 51

367 <210> SEQ ID NO: 25

368 <211> LENGTH: 351

369 <212> TYPE: DNA

370 <213> ORGANISM: Mouse

372 <400> SEQUENCE: 25

```

374 caggtcaagc tgcagcagtc tggggcagag cttgtggggt caggggcctc agtcaaattg 60
375 tcctgcacaa cttctggctt caacattaaa gacttctata tgcactgggt gaagcagagg 120
376 cctgaacagg gcctggagtg gattggatgg attgatcctg agaatgggtg ttctgattat 180
377 gccccgaagt tccagggcaa ggccaccatg actgcagact catcctccaa cacagcctac 240
378 ctgcagctca gcagcctgac atctgaggac actgccgtct attactgtaa tgcatactat 300

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/865,198

DATE: 06/12/2001

TIME: 13:14:55

Input Set : A:\es.txt

Output Set: N:\CRF3\06122001\I865198.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application Number